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**AMERICAN UNIVERSITY OF BEIRUT:  
A FINANCIAL FORECAST**

AGENCY FOR INTERNATIONAL DEVELOPMENT

**DECEMBER 1984**

BOOZ ALLEN & HAMILTON INC.

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A FINANCIAL FORECAST

Agency for International Development

December 1984

# BOOZ ALLEN & HAMILTON INC.

4330 EAST WEST HIGHWAY • BETHESDA, MARYLAND 20814-4455 • TELEPHONE: (301) 951-2200 • TELEX II: 710-824-0552

December 20, 1984

Mr. John Swallow  
NE/TECH/HRST  
Agency for International Development  
Washington, D. C. 20523

Dear Mr. Swallow:

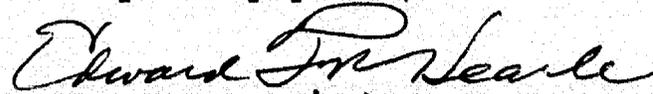
With this letter we provide our report entitled American University of Beirut: A Financial Forecast. This report has been prepared over the past three weeks in accordance with Work Order 7 under Indefinite Quantity Contract OTR-0000-I-3506-00.

The report is designed to provide a forecast of the University's estimated revenues and expenditures over the next several years. Our forecasts are based on a review of recent performance and a brief analysis of factors that may affect the future. In this review and analysis we have interviewed the University officials and examined the documents listed in Appendix C. The forecasts are integrated into two financial scenarios that incorporate different sets of assumptions.

Officials of the University -- particularly Vice President William Rice and Washington Representative William Hoffman -- have been fully co-operative and helpful. Because data on which the analysis is based have come from many sources and in light of the extraordinarily brief study period, we suggest that the report be provided to University officials for factual verification.

We trust that this report will be helpful to the Agency in considering its financial support to the University.

Very truly yours,



BOOZ ALLEN & HAMILTON Inc.

Edward F. R. Hearle  
Senior Vice President

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## I. OVERVIEW OF THE UNIVERSITY

The American University of Beirut (AUB), founded in 1866, is a remarkable institution that has continued to operate in nearly a normal mode despite the unstable security situation in Lebanon. AUB today provides a full range of undergraduate and graduate programs to some 4,700 students. The array of characteristics and statistics presented in Exhibit I describes AUB.

In conjunction with its Health Services programs, AUB operates a 421-bed hospital. The hospital has been a major provider of exceptional health-care and a distinguished institution for the clinical training of physicians and other health care professionals for many years. In addition to graduating over 100 health-care professionals annually, the AUB Medical Center touches the lives of 15,000 to 17,000 in-patients every year and nearly as many out-patients in the emergency room and clinics.

EXHIBIT I

American University of Beirut  
UNIVERSITY CHARACTERISTICS

Founded: 1866

Board of Trustees: 25 members, 16 of whom are Americans

President: Dr. Calvin Plimpton (American)

Language of Instruction: English

Location:

- . Main campus is located in Ras Beirut.
- . Agriculture Research and Education Center is located 50 miles away from Beirut in the Bekaa Valley.
- . Book value of the investment in plant is \$94.8 million. This figure is based on an appraisal made in 1965, plus subsequent additions at cost, less depreciation. Given the current security situations, other methods of determining value are problematic.
- . Research and Development Administration Center (RADAC) is administering development contracts in Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, and Lebanon.

Undergraduate and Graduate Programs (1984-85):

- . 4,778 Students in Undergraduate, Graduate, and Medical Programs
  - Undergraduate 3,756
  - Graduate 639
  - Medical School 383
  - Total 4,778

EXHIBIT I (Cont'd)

Student Profile

- 59% Male, 41% Female
- 83% Lebanese, 12% Other Arab, 5% Other\*

Tuition for 1984-85 (\$1-8LL\*\*)

	1984 - 1985			
	Lebanese Pound LL		\$ U.S.	
	<u>Undergraduate</u>	<u>Graduate, Per Credit</u>	<u>Undergraduate</u>	<u>Graduate, Per Credit</u>
- <u>Faculty of Arts and Sciences</u>				
Arts	14,000	736	1,750	92
Sciences	14,840	765	1,855	96
Business Admini- stration	17,080	795	2,135	99
- <u>Faculty of Agriculture and Food Services</u>				
All Programs	17,240	885	2,155	111
- <u>Faculty of Engineering and Architecture</u>				
All Programs	19,090	910	2,386	114

\* The 1970-71 mix was 47% Lebanese, 31% Other Arab, and 22% Other.

\*\*LL=Lebanese Pound

## EXHIBIT I (Cont'd)

	1984 - 1985			
	Lebanese Pounds (LL)		\$ U.S.	
	<u>Undergraduate</u>	<u>Graduate, Per Credit</u>	<u>Undergraduate</u>	<u>Graduate, Per Credit</u>
- <u>Faculty of Health Services</u>				
<u>Public Health</u>				
All BS Programs	18,390	900	2,299	113
MPH Program	24,000	NA	3,000	NA
Lab Technology -				
1st Year	18,390	NA	2,299	NA
Lab Technology -				
2nd Year	9,200	NA	1,150	NA
<u>Nursing</u>				
BSN Program	13,800	NA	1,725	NA
Post-Basic				
Training	15,390	NA	1,924	NA
Associate Degree				
Program	10,000	NA	1,250	NA
<u>X-Ray Technician</u>				
X-Ray Program	2,760	NA	345	NA
- <u>Faculty of Medicine</u>				
1st to 4th Year	33,400	930	4,175	116
5th Year	310	NA	39	NA

EXHIBIT I (Cont'd)

Special Programs:

- . Office of Extension Programs
  - On-Campus and Off-Campus Programs
  - Full-Time Short Courses, Institutes, Part-Time Evening Courses, and Seminars
  - Enrollment in 1984-85: 202
- . Department of Education (Teacher Education)
- . University Orientation Program (Intensive English Language Training)

Faculty (total):

- . 330 Full-Time Faculty; 95% with PhD or MD Degrees
- . 62 Part-Time Medical Staff
- . 156 Medical House Staff
- . 80% Arab Countries, 8% Americans, 12% Other

Degrees Offered:

- . The University's five faculties offer BA, BS, BBA, MA, MS, MBA, PhD, and MD degrees.
- . Certificates are offered in the Extension Programs.
- . Number of degrees granted in 1981-1982

Bachelor's	960
Master's	192
PhD	5
MD	62

EXHIBIT I (Cont'd)

Library:

- . 415,000 Volumes
- . 4,500 Current Periodicals
- . 1,200 Manuscripts

Alumni: 26,000 (2,500 alumni, former faculty, and staff identified in North America)

## II. ACADEMIC PROGRAMS

The academic programs of the American University of Beirut are provided by its five faculties:

- . Arts and Sciences
- . Medicine
- . Engineering and Architecture
- . Agricultural and Food Science
- . Health Services.

The Faculty of Arts and Sciences, in addition to its regular undergraduate and graduate programs, has a Center for Arab and Middle East Studies, a Center for Behavioral Research, a Center for English Language Research and Teaching, and a Graduate School of Business and Management. The Division of Education, another part of the Faculty of Arts and Sciences, offers undergraduate and graduate programs in education as well as various services for improving regional educational systems. The latter includes the Science and Mathematics Education Center (SMEC), which provides practical assistance to governments in the region in developing science and mathematics curricula. The Division of Education includes the Office of Tests and Measurements.

The University's 421-bed hospital is part of a complex of buildings and training facilities making up the AUB Medical Center. The Medical Library, the Basic Sciences Building, and the Postgraduate Medical Education Center are included in the Medical Center.

The University is actively providing professional and technical assistance to Lebanon and other countries in the Arab world. This activity, particularly in the fields of agriculture, medicine, health services, education, and business and management, is facilitated through AUB's Research and Development Administration Center (RADAC). At present, RADAC administers 18 development projects in Lebanon, Saudi Arabia, Bahrain, Qatar, and the United Arab Emirates. AUB's educational and health services continue to be in demand, and the University is meeting this challenge by providing the professional expertise needed to carry forward new projects throughout the region.

Over the years, AUB has presented the best in American education and values to generations of Arab students. Its thousands of graduates are scattered throughout the Arab world; many now hold key positions in government, the professions, education, business, and industry. Almost all AUB faculty members (about 8% of whom are American citizens) received their advanced degrees in the United States. They use American methodologies and textbooks, and they emphasize Western values in their courses and laboratory practice. In the professional schools the "hands-on" approach is used throughout. At the same time, every student in each of these schools -- Medicine, Public Health, Nursing, Engineering and Architecture, Agriculture, and Business and Management -- also is provided with the opportunity to obtain an education in the humanities and social sciences. The University continues to attract highly qualified candidates from Lebanon and still cannot accommodate the number of students who apply each year.\* The kind of education these students receive at AUB, their understanding of Western ideas and values, and their knowledge of and ability to use Western methodologies and technologies are valuable assets for the students themselves and for the region.

#### CURRICULUM AND STUDENTS

Despite the hostile conditions under which the University has operated in recent years and the deterioration of quality in several areas of University life, AUB programs continue to grow and mature. The security situation has affected the University in several ways. Faculty recruiting and the maintenance of current materials in the AUB library are made more difficult under the security situation. On the other hand, the dedication and intensity of the study body have increased compared to 10 years ago. In fact, some estimate that there are fewer class days lost currently than there were 10 years ago, when students in universities throughout the world would walk out of classes and demonstrate at the slightest provocation. Although not verifiable through objective measurements, it is reported that the caliber of students entering AUB has not decreased.

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\* Before the outbreak of hostilities in the mid-1970s, AUB's student body was roughly 50% Lebanese and 50% non-Lebanese. Since then, the mix has shifted toward the Lebanese, who now constitute an 83% share of the student body. Practically all of the non-Lebanese students are sponsored either by the U.S. Agency for International Development (AID), other governments, or business. The cutback in U.S. AID scholarships is expected to further reduce non-Lebanese enrollment.

Exhibit II, following this page, summarizes the curricula and students of the various faculties of AUB. Included are:

- . The program areas covered by each faculty.
- . The demand for the programs offered by the faculty, measured by the number of applicants in 1982 and 1983, the number of applicants accepted by the faculty, and the ratio of the two.
- . The enrollment of students in faculty programs during the years 1981 to 1984. (The enrollment statistics are for the second semester of the academic year.)
- . The number and type of degrees awarded in 1981 and 1982.
- . Statistics indicating the number of faculty members in each area.

#### SIGNIFICANT CHANGES IN ACADEMIC PROGRAMS

Although the overall academic program has remained relatively stable in recent years, two major programs have recently been established: the Money and Banking program and the Computer Science program.

The Institute of Money and Banking was established in 1983 to accomplish the following:

- . Organize research and policy studies in the areas of money, banking (national and international), and financial institutions, with particular emphasis on the Arab world.
- . Hold seminars in which academicians, policy makers, bankers, and financial managers participate.
- . Establish a graduate program that will lead to a Master's Degree in Money and Banking.
- . Assist, whenever possible, in carrying out training programs for banking and other financial institutions.

EXHIBIT II

American University of Beirut  
ACADEMIC PROGRAMS

FACULTY	PROGRAM AREAS	DEMAND				ENROLLMENT		DEGREES		FACULTY STATISTICS	
		Year	Appl.	Accept	Ratio	Year	Number	Year	Number	Year	Number
ARTS AND SCIENCES	. English Language	1982	1,795	1,132	1.59	1981	2,489	1981	569	1983	40 Prof.
	. English Literature	1983	1,787	1,233	1.45	1982	2,410	1982	700		28 Ass.
	. Philosophy					1983	2,405	2-Yr Total			37 Asst.
	. Anthropology					1984	1,756	Bach's	1,131		26 Inst.
	. Archaeology							Master's	138		8 Lect.
	. Economics										139 Total
	. History										
	. Political Studies										
	. Public Administration										Student Faculty
	. Sociology										(S/F) Ratio: 17.
	. Sociology/Anthropology										
	. Psychology										
	. Mathematics										
	MEDICINE	. Medicine	1982	332	130	2.55	1981	599	1981	141	1983
. Biochemistry		1983	320	118	2.71	1982	609	1982	127		21 Ass.
. Nursing						1983	587	2-Yr Total			41 Asst.
. Undergraduate Nursing						1984	551	MD	133		11 Inst.
								Other	135		1 Lect.
										7 Other	
										113 Total	
HEALTH SERVICES	. Environmental Health	1982	230	94	2.45	1981	160	1981	47	1983	1 Prof.
	. Basic Laboratory Technique	1983	258	154	1.68	1982	202	1982	71		4 Ass. Pr.
	. Public Health					1983	221	2-Yr Total			3 Asst. Pr.
	. Health and Hospital Administration					1984	221	Diploma	44		2 Inst.
	. Epidemiology and Biostatistics							Bachelor's	38		1 Other
	. Epidemiology							Master's	36		11 Total
ENGINEERING AND ARCHITECTURE	. Architecture	1982	1,119	295	3.79	1981	834	1981	163	1983	5 Prof.
	. Urban Planning and Urban Design	1983	1,234	303	4.07	1982	796	1982	218		11 Ass. Pr.
	. Civil Engineering					1983	804	2-Yr Total			5 Asst. Pr.
	. Electrical Engineering					1984	651	Bachelor's	379		1 Lect.
	. Mechanical Engineering							Master's	2		22 Total
										S/F Ratio: 36.5	

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EXHIBIT II (Cont'd)

FACULTY	PROGRAM AREAS	DEMAND				ENROLLMENT		DEGREES		FACULTY STATISTICS	
		Year	Appl.	Accept	Ratio	Year	Number	Year	Number	Year	Number
AGRICULTURE AND FOOD SERVICE	. General Agriculture	1982	197	154	1.28	1981	361	1981	131	1983	8 Prof.
	. Agronomy	1983	178	151	1.18	1982	374	1982	160		6 Ass. Prof
	. Soils and Irrigation					1983	385	2-Yr Total			5 Asst. Pro
						1984	290	Diploma	92		4 Inst.
	. Animal Production							Bachelor's	92		2 Other
								Master's	107		25 Total
	. Poultry Production										
	. Entomology										
	. Horticulture										
	. Plant Pathology										
. Plant Protection											
										S/F Ratio: 15.4	
DEPARTMENT OF EDUCATION AND EXTENSION PROGRAMS*	. Teaching Diploma	1982	45	29	1.55	1981	509	1981	49	1983	2 Prof.
	. Educational Administration and Supervision	1983	43	43	0.98	1982	649	1982	56		6 Ass. Prof
						1983	532	2-Yr Total			3 sst. Pro
	. Special Programs					1984	988	Diploma	3		5 Inst.
							Master's	32		2 Lect.	
							TD	70		2 Other	
										20 Total	
										S/F Ratio: 26.6	
TOTAL		1982	3,718	1,834	2.03	1981	4,952	1981	1,100	1983	88 Prof.
		1983	3,819	2,022	1.89	1982	5,040	1982	1,332		76 Ass. Prof
						1983	4,934				94 Asst. Prof
						1984	4,457				48 Inst.
								2-Yr Total			12 Lect.
								Bachelor's	1,640		12 Other
								Master's	315		330 Total
								MD	133		
								Other	344		S/F Ratio 15.0**

\* The Department of Education and Extension Programs has subsequently been reorganized with the Department of Education, reporting to the Faculty of Arts and Sciences. Extension Programs report to the Vice President for External Affairs.

\*\* The average student-faculty (S/F) ratio for all American colleges and universities is about 14.0.

The Institute of Computer Sciences was established in 1983 to consolidate the various computer-related disciplines, namely, computer sciences, engineering systems, and applications. The primary objectives of the Institute are as follows:

- . To educate and train computer professionals to play a leading role in the region in a field of rapidly increasing importance.
- . To promote research in computer-related areas that are relevant to the region and that capitalize on special resources available at AUB.
- . To provide instructions in computer-related areas to other departments and units of AUB and to promote computer literacy throughout the University.

### III. FINANCIAL SITUATION

This section of the report describes the financial situation at AUB\*, covering revenue and expenditures under two basic scenarios:

- . "Baseline," or Maintenance of Current Programs
- . Enhancements in Enrollment, Faculty Productivity, and Development Efforts.

A discussion of several key financial issues is included at the end of this chapter. In developing the scenarios, no formal alternatives or enhancements were developed for American University Hospital (AUH) because of the complicated nature of hospital operations that could not be assessed without an on-site visit. Certain aspects of hospital operations are included in the financial issues presented at the end of this chapter.

The projections are based on the budgets prepared by AUB in November 1984. AUB revised the 1984-85 budget to reflect changes in the security situation in Beirut in 1984 and the deteriorating economic condition in the country. An "order-of-magnitude" budget for the 1985-86 academic year was prepared (which has not been approved by the AUB Board of Trustees). It represents a financial extension of the prior year's experience without major policy changes.

\* See Appendix B for a description of a report by Booz, Allen & Hamilton Inc. entitled Strengthening the American University of Beirut, June 1983.

## SCENARIO ONE - "BASELINE," OR MAINTENANCE OF CURRENT PROGRAMS

In this scenario, revenues and expenditures are projected for the next three academic years based on the 1985-86 order-of-magnitude budget prepared by AUB. Key assumptions include the following:

- . Academic program remains constant.
- . Enrollment remains constant at the level included in the order-of-magnitude budget.
- . Tuition increases by 19% per year.
- . Faculty load in terms of teaching hours and faculty-student ratio remains constant.
- . RADAC revenue and expenditures increase 20% per year.
- . Salaries increase 11.7% in 1985-86 and 15% per year thereafter.
- . Hospital revenues decline in 1985-86 and then increase 20% per year.
- . Hospital expenses increase 30% per year.
- . Gift and endowment income remain constant at the order-of-magnitude level.
- . No major shift occurs in the distribution of revenue and expenditures between U.S. dollars and Lebanese pounds.\*
- . Minor revenue/expenditure accounts vary according to AUB estimates.

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\* For purposes of the order-of-magnitude budget, 35% of the revenue would be U.S. dollars and 65% Lebanese pounds. Expenditures were budgeted at 41% U.S. dollars and 59% Lebanese pounds.

The AUB order-of-magnitude budget provides a reasonable basis for projection because it reflects the economic conditions that seem likely to prevail in the immediate future. Even if the security situation improves, the impact of national reconstruction would probably continue the inflationary pressures that affect University operations. In particular, accumulated and current hospital charges due from the Government will continue to be affected by Government revenues shaped by these national economic conditions.

Exhibit III, following this page, summarizes projected revenues and expenses for this baseline scenario for the next three academic years. The comments in the right-hand column describe the basis used for the projections.

(1) Revenues Are Projected to Increase 41% Over the Next Three Years

Based on the projections shown in Exhibit III, revenues are expected to increase from \$60.1 million in the current academic year to \$84.5 million in the 1987-88 academic year. Total revenue projections are summarized in the following table.

REVENUE PROJECTIONS  
(\$ Million)

<u>Revenue Category</u>	<u>Academic Year</u>			
	<u>1984-1985</u>	<u>1985-1986</u>	<u>1986-1987</u>	<u>1987-1988</u>
Educational and General	27.1	31.2	36.5	42.8
Health Services (Hospital)	26.7	24.5	29.3	35.0
Auxiliary Enterprises	2.6	2.8	3.1	3.4
Nonfunctional	3.7	3.3	3.3	3.3
TOTAL	60.1	61.8	72.2	84.5

Within the "Educational and General" category there are two principal factors contributing to the growth in revenues: the annual tuition increase and a continuation of the historic growth associated with RADAC activities in the Middle East. Health services (hospital) revenue shows a decrease in the first year because of an expected further shift in the rate classification of the patient mix and because of

**EXHIBIT III**

**American University of Beirut  
BASELINE SCENARIO  
(\$ Million)**

<u>REVENUE</u>	<u>ACADEMIC YEAR</u>				<u>COMMENTS</u>
	<u>84-85</u>	<u>85-86</u>	<u>86-87</u>	<u>87-88</u>	
<u>Educational &amp; General</u>					
Student Tuition & Fees - Regular & Bursary Students	11.5	13.3	15.8	18.8	. 19% based on AUB projection; students constant - 4,700 full-time equivalent (FTE) (1986)
U.S. AID Training Program	0.6	0.5	0.3	0.1	. Being phased out
Hariri Training Contract	0.9	1.4	1.4	1.4	. Maintenance of order-of-magnitude level
Extension	0.3	0.3	0.4	0.4	
Endowment Income	0.9	0.9	0.9	0.9	. Constant
Gifts & Grants (Other Than U.S. Gov't.)	0.8	0.8	0.8	0.8	. Constant
Grants & Contracts (U.S. Gov't.)	0.1	0.1	0.1	0.1	. Constant
RADAC Grants & Contracts	9.3	11.2	13.4	16.1	. 20% increase
Other	2.7	2.7	3.4	4.2	. 25% increase based on order-of-magnitude budget
<b>Total Educational &amp; General</b>	<b>27.1</b>	<b>31.2</b>	<b>36.5</b>	<b>42.8</b>	
<u>Health Services (Hospital)</u>					
Patient & Related Services	25.6	24.4	29.2	34.9	. 20% based on AUB projection
Endowment Income	0.1	0.1	0.1	0.1	. Constant
Other	1.0	0.0	0.0	0.0	
<b>Total Health Services (Hospital)</b>	<b>26.7</b>	<b>24.5</b>	<b>29.3</b>	<b>35.0</b>	
<u>Auxiliary Enterprises</u>	2.6	2.8	3.1	3.4	. 9% based on AUB projection
<u>Nonfunctional Revenue</u>					
Endowment Income - Unrestricted	0.4	0.4	0.4	0.4	. Constant
Gifts - Unrestricted	2.9	2.5	2.5	0.4	. Constant
Interest Income	0.4	0.4	0.4	0.4	. Constant
<b>Total Nonfunctional Revenue</b>	<b>3.7</b>	<b>3.3</b>	<b>3.3</b>	<b>3.3</b>	
<b>TOTAL REVENUE</b>	<b>60.1</b>	<b>61.8</b>	<b>72.2</b>	<b>84.5</b>	

## EXHIBIT III (continued)

American University of Beirut  
 BASELINE SCENARIO  
 (\$ Million)

EXPENDITURES	ACADEMIC YEAR				COMMENTS
	84-85	85-86	86-87	87-88	
<u>Educational &amp; General</u>					
Academic Programs	17.7	19.8	22.8	26.2	. Based on order-of-magnitude projection (11.7%) in 85-86; 15% in second and third years
RADAC	8.9	10.7	12.8	15.4	. 20% increase
Other Research & Extension Programs	1.4	1.6	1.8	2.1	. 14% based on AUB projection
Other Educ. & General	9.5	9.8	10.4	10.4	. 3% based on AUB projection
Rehab. of Equip. & Bldgs.	1.3	1.2	1.2	1.2	. Constant
Total Educational and General	38.8	43.1	48.7	55.3	
<u>Health Services (Hospital)</u>					
Operating Expenditures	29.5	29.6	38.5	50.0	. Order-of-magnitude; 30% in second and third years
Rehab. of Equip. & Bldgs.	-	3.0	3.0	3.0	. Constant
Amortization of Bank Loans	0.3	0.2	0.2	0.2	. Constant
Total Health Services	29.8	32.8	41.7	53.2	
<u>Auxiliary Enterprises</u>	2.7	3.1	3.7	4.3	. 17% based on AUB projection
<u>Support Services</u>					
New York Office	1.0	1.2	1.4	1.6	. 15% based on AUB projection
Fundraising & Public Relations	1.2	0.8	1.0	1.1	. Order-of-magnitude; 15% in second and third years
Total Support Services	2.2	2.0	2.4	2.7	
<b>TOTAL EXPENDITURES</b>	<b>73.5</b>	<b>81.0</b>	<b>96.5</b>	<b>115.5</b>	

changes in the exchange rate. Revenues then increase at the assumed rate to \$35 million in the third year of the projection.\*

(2) Expenditures Are Projected to Increase 57% Over the Next Three Years

Based on the projections shown in Exhibit III, expenditures are expected to increase from \$73.5 million in the current academic year to \$115.5 million in the 1987-88 academic year. Total expenditure projections are shown in the following table.

EXPENDITURE PROJECTIONS  
(\$ Million)

<u>Expenditure Category</u>	<u>Academic Year</u>			
	<u>1984-1985</u>	<u>1985-1986</u>	<u>1986-1987</u>	<u>1987-1988</u>
Educational and General	38.8	43.1	48.7	55.3
Health Services(Hospital)	29.8	32.8	41.7	53.2
Auxiliary Enterprises	2.7	3.1	3.7	4.3
Support Services	2.2	2.0	2.4	2.7
TOTAL	73.5	81.0	96.5	115.5

The principal components of the expenditure growth in the "Educational and General" category are in the academic programs (due to the projected salary increases) and in RADAC (to support its growth in revenue). It is projected that expenditures for the academic programs will increase from \$17.7 million in the current academic year to \$26.2 in the 1987-88 academic year. RADAC expenditures are expected to increase from \$8.9 million to \$15.4 million over the same period.

\* A more detailed discussion of the hospital financial situation is presented at the end of this chapter.

Exhibit IV, following this page, summarizes the revenue and expenditure projections for this basic scenario. To provide some historical perspective, the revenues and expenditures for the past three years are shown, as is information on the amount of funding given in AID grants from 1981-82 to 1984-85.\* AID scholarships were included in the "Educational and General - Revenue" category in this detailed exhibit.

As shown in the exhibit, the deficit problem is shared by the educational and general activities and the health services (hospital) activities. It is projected that the deficits will grow to \$12.5 million (education and general) and \$18.2 million (health services) by the 1987-88 academic year. In the past three years, AID grants have been used to balance the combined deficits; if that policy is to continue and the assumptions used for this scenario are valid, AID grants will have to grow substantially in the future.

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\* The AID grant information is displayed in accordance with the utilization of the AID monies by AUB. U.S. AID grants to AUB by Federal Government fiscal year are FY82 \$8.5 million; FY83 - \$11.0 million and FY84 - \$12.6 million.

## EXHIBIT IV

American University of Beirut  
 BASELINE SCENARIO  
 SUMMARY OF REVENUE AND EXPENDITURES  
 (\$ Million)

	<u>Academic Year</u>						
	1981-1982 (Actual)	1982-1983 (Actual)	1983-1984 (Estimate)	1984-1985 (AUB)	1985-1986 (AUB)	<u>Projections</u>	
						1986-1987 (BAH)	1987-1988 (BAH)
<b>EDUCATIONAL AND GENERAL</b>							
Revenue	19.4	25.4	27.4	27.1	31.2	36.5	42.8
Expenditure	26.6	34.3	36.0	38.8	43.1	48.7	55.3
(Deficit)	(7.2)	(8.9)	(8.6)	(11.7)	(11.9)	(12.2)	(12.5)
<b>HEALTH SERVICES (HOSPITAL)</b>							
Revenue	24.7	28.9	25.9	26.7	24.5	29.3	35.0
Expenditures	25.1	32.1	32.0	29.8	32.8	41.7	53.2
(Deficit)	(0.4)	(3.2)	(6.1)	(3.1)	(8.3)	(12.4)	(18.2)
<b>AUXILIARY ENTERPRISES</b>							
Revenue	2.4	2.7	2.4	2.6	2.8	3.1	3.4
Expenditures	2.3	2.6	2.4	2.7	3.1	3.7	4.3
Surplus/(Deficit)	0.1	0.1	0	(0.1)	(0.3)	(0.6)	(0.9)
<b>OTHER</b>							
Nonfunctional Revenue	1.8	3.3	3.2	3.7	3.3	3.3	3.3
Support Services Expenditures	0.7	0.9	1.2	2.2	2.0	2.4	2.7
Surplus	1.1	2.4	2.0	1.5	1.3	0.9	0.6
<b>TOTAL DEFICIT</b>	<b>(6.4)</b>	<b>(9.6)</b>	<b>(12.7)</b>	<b>(13.6)</b>	<b>(19.2)</b>	<b>(24.3)</b>	<b>(31.0)</b>
<b>AID GRANTS</b>	<b>6.5</b>	<b>9.5</b>	<b>12.6</b>	<b>10.0*</b>			

\* BAH projection; additional grant monies have been requested by AUB.

## SCENARIO TWO - ENHANCEMENTS IN ENROLLMENTS, FACULTY PRODUCTIVITY, AND DEVELOPMENT EFFORTS

A second scenario for AUB financial projections involves enhancements in enrollments, faculty productivity, and development results. Key assumptions are as follows:

- . Academic program remains constant.
- . Enrollment increases to 5,000 students in the 1987-88 academic year.
- . Tuition increases by 19% per year.
- . Faculty load increases from 9 credits per semester to 12 credits per semester over the three-year projection period.
- . RADAC revenues and expenditures increase 20% per year.
- . Salaries increase 11.7% in 1985-86 and 15% per year thereafter.
- . Hospital revenues decline in 1985-86 and then increase 20% per year.
- . Hospital expenditures increase 30% per year.
- . Endowment income stays constant.
- . Gifts increase 12% per year as a result of development effort.
- . Minor revenue/expenditure accounts vary according to AUB estimates.
- . Auxiliary enterprises revenue and expenditures increase with enrollment.

Exhibit V, following this page, summarizes the revenue and expenditure projections under this scenario for the next three academic years. The comments in the right hand column explain the basis for the projections in this scenario whenever they differ from the projections made in the baseline scenario. The projections are based on the AUB budget for the 1984-85 academic year and reflect assumptions applied to the 1985-86 order-of-magnitude budget.

## EXHIBIT V

American University of Beirut  
SCENARIO WITH ENHANCEMENTS IN ENROLLMENT,  
FACULTY PRODUCTIVITY, AND DEVELOPMENT  
(\$ Million)

REVENUE	ACADEMIC YEAR				COMMENTS
	84-85	85-86	86-87	87-88	
<u>Educational &amp; General</u>					
Student Tuition & Fees - Regular & Bursary Students	11.5	13.3	16.3	20.0	Number of students increases to 5,000 (FTE) in the final year
U.S. AID Training Program	0.6	0.5	0.3	0.1	
Hariri Training Contract	0.9	1.4	1.4	1.4	
Extension	0.3	0.3	0.4	0.4	
Endowment Income	0.9	0.9	0.9	0.9	
Gifts & Grants (Other Than U.S. Gov't.)	0.8	0.9	1.0	1.1	Development program results in 12% increase per year
Grants & Contracts (U.S. Gov't.)	0.1	0.1	0.1	0.1	
RADAC Grants & Contracts	9.3	11.2	13.4	16.1	
Other	2.7	2.7	3.4	4.2	
Total Educational & General	27.1	31.3	37.2	44.3	
<u>Health Services (Hospital)</u>					
Patient & Related Services	25.6	24.4	29.2	34.9	
Endowment Income	0.1	0.1	0.1	0.1	
Other	1.0	-	-	-	
Total Health Services	26.7	24.5	29.3	35.0	
<u>Auxiliary Enterprises</u>	2.6	2.8	3.2	3.6	Number of students increases to 5,000 (FTE) in final year
<u>Nonfunctional Revenue</u>					
Endowment Income - Unrestricted	0.4	0.4	0.4	0.4	
Gifts - Unrestricted	2.9	3.2	3.6	4.1	Development program results in 12% increase per year
Interest Income	0.4	0.4	0.4	0.4	
Total Nonfunctional Revenue	3.7	4.0	4.4	4.9	
TOTAL REVENUE	60.1	62.6	74.1	87.8	

## EXHIBIT V (continued)

American University of Beirut  
SCENARIO WITH ENHANCEMENTS IN ENROLLMENT,  
FACULTY PRODUCTIVITY, AND DEVELOPMENT  
(\$ Million)

EXPENDITURES	ACADEMIC YEAR				COMMENTS
	84-85	85-86	86-87	87-88	
<u>Educational &amp; General</u>					
Academic Programs	17.7	17.8	19.2	20.9	. Based order-of-magnitude projection (11.7%) in 85-86 and 15% in second and third years; increase in load to 12 hrs./semester; and increase in number of students
RADAC	8.9	10.7	12.8	15.4	
Other Research & Ext. Programs	1.4	1.6	1.8	2.1	
Other Educ. & General	9.5	9.8	10.4	11.1	. Number of students increases to 5,000 (FTE) in final year
Rehab. of Equip. & Bldgs.	1.3	1.2	1.2	1.2	
Total Educational and General	38.8	41.1	45.4	50.7	
<u>Health Services (Hospital)</u>					
Operating Expenditures	29.5	29.6	36.5	50.0	
Rehab. of Equip. & Bldgs.	-	3.0	3.0	3.0	
Amortization of Bank Loans	0.3	0.2	0.2	0.2	
Total Health Services	29.8	32.8	41.7	53.2	
<u>Auxiliary Enterprises</u>	2.7	3.1	3.8	4.6	
<u>Support Services</u>					
New York Office	1.0	1.2	1.4	1.6	
Fundraising & Public Relations	1.2	0.8	1.0	1.1	
Total Support Services	2.2	2.0	2.4	2.7	
<b>TOTAL EXPENDITURES</b>	<b>73.5</b>	<b>79.0</b>	<b>93.3</b>	<b>111.2</b>	

(1) Revenues Are Projected to Increase 46% Over the Next Three Years

Based on the projections shown in Exhibit V, revenues are expected to increase from \$60.1 million in the current academic year to \$87.8 million in the 1987-88 academic year. Total revenue projections are summarized in the following table.

REVENUE PROJECTIONS  
(\$ Million)

<u>Revenue Category</u>	<u>Academic Year</u>			
	<u>1984-1985</u>	<u>1985-1986</u>	<u>1986-1987</u>	<u>1987-1988</u>
Educational and General	27.1	31.3	37.2	44.3
Health Services (Hospital)	26.7	24.5	29.3	35.0
Auxiliary Enterprises	2.6	2.8	3.2	3.6
Nonfunctional	3.7	4.0	4.4	4.9
TOTAL	60.1	62.6	74.1	87.8

The principal factors contributing to changes in revenue projections from the baseline scenario are the increased enrollment and the improved results of the development program. As shown in the following table, these factors result in a \$3.3 million increase in the revenues projected for the 1987-88 academic year.

REVENUE COMPARISONS  
(\$ Million)

	<u>Academic Year</u>			
	<u>1984-1985</u>	<u>1985-1986</u>	<u>1986-1987</u>	<u>1987-1988</u>
Baseline Scenario	60.1	61.8	72.2	84.5
Enhancement Scenario	60.1	62.6	74.1	87.8
INCREASED REVENUE	0	0.8	1.9	3.3

(2) Expenditures Are Projected to Increase 51% Over the Next Three Years

Based on the projections shown in Exhibit V, expenditures are expected to increase from \$73.5 million to \$111.2 million in the 1987-88 academic year. Total expenditure projections are shown in the following table.

EXPENDITURE PROJECTIONS  
(\$ Million)

<u>Expenditure Category</u>	<u>Academic Year</u>			
	<u>1984-1985</u>	<u>1985-1986</u>	<u>1986-1987</u>	<u>1987-1988</u>
Educational and General	38.8	41.1	45.4	50.7
Health Services (Hospital)	29.8	32.8	41.7	53.2
Auxiliary Enterprises	2.7	3.1	3.8	4.6
Support Services	2.2	2.0	2.4	2.7
TOTAL	73.5	79.0	93.3	111.2

The principal factor contributing to the decrease in expenditures is the improvement in faculty productivity. This more than compensates for the increase in expenditures associated with increased enrollments. A comparison of the anticipated expenditures is shown in the following table.

EXPENDITURE COMPARISONS  
(\$ Million)

	<u>Academic Year</u>			
	<u>1984-1985</u>	<u>1985-1986</u>	<u>1986-1987</u>	<u>1987-1988</u>
Baseline Scenario	73.5	81.0	96.5	115.5
Enhancement Scenario	73.5	79.0	93.3	111.2
DECREASED EXPENDITURES	-	2.0	3.2	4.3

(3) The Deficit Is Projected to Grow to \$23.4 Million by the 1987-88 Academic Year Under the Enhancement Scenario

Exhibit VI, following this page, summarizes the revenue and expenditure projections for this enhancement scenario. It includes actual revenue and expenditure figures for the past three years to provide some perspective.

As shown in the exhibit, the enhancements suggested in this scenario reduce the deficit in the "Educational and General" category from \$11.7 million in the current year to \$6.4 million in the 1987-88 academic year. The enhancements are indicative of the types of actions that will be necessary to overcome the deteriorating economic climate associated with the security problems in Lebanon.

This scenario did not change any of the assumptions associated with the health services projections, which show an \$18.2 million deficit in the 1987-88 academic year. This growing deficit is directly associated with the 20% growth in revenues at the same time as expenditures are expected to grow 30% per year. If the rate of growth in the revenues can be brought in line with the anticipated growth in expenditures (30%), \$6.3 million of the health services' \$18.2 million deficit would be eliminated.

## EXHIBIT VI

American University of Beirut  
 ENHANCEMENT SCENARIO  
 SUMMARY OF REVENUE AND EXPENDITURES  
 (\$ Million)

	<u>Academic Year</u>				<u>Projections</u>		
	<u>1981-1982</u> (Actual)	<u>1982-1983</u> (Actual)	<u>1983-1984</u> (Estimate)	<u>1984-1985</u> (AUB)	<u>1985-1986</u> (BAH)	<u>1986-1987</u> (BAH)	<u>1987-1988</u> (BAH)
<b>EDUCATIONAL AND GENERAL</b>							
Revenue	19.4	25.4	27.4	27.1	31.3	37.2	44.3
Expenditures	26.6	34.3	36.0	38.8	41.1	45.4	50.7
(Deficit)	(7.2)	(8.9)	(8.6)	(11.7)	(9.8)	(8.2)	(6.4)
<b>HEALTH SERVICES (HOSPITAL)</b>							
Revenue	24.7	28.9	25.9	26.7	24.5	29.3	35.0
Expenditures	25.1	32.1	32.0	29.8	32.8	41.7	53.2
(Deficit)	(0.4)	(3.2)	(6.1)	(3.1)	(8.3)	(12.4)	(18.2)
<b>AUXILIARY ENTERPRISES</b>							
Revenue	2.4	2.7	2.4	2.6	2.8	3.2	3.6
Expenditures	2.3	2.6	2.4	2.7	3.1	3.8	4.6
Surplus/(Deficit)	0.1	0.1	0.0	(0.1)	(0.3)	(0.6)	(1.0)
<b>OTHER</b>							
Nonfunctional Revenue	1.8	3.3	3.2	3.7	4.0	4.4	4.9
Support Services Expenditures	0.7	0.9	1.2	2.2	2.0	2.4	2.7
Surplus	1.1	2.4	2.0	1.5	2.0	2.0	2.2
<b>TOTAL DEFICIT</b>	<b>(6.4)</b>	<b>(9.6)</b>	<b>(12.7)</b>	<b>(13.4)</b>	<b>(16.4)</b>	<b>(19.2)</b>	<b>(23.4)</b>
<b>AD GRANTS</b>	<b>6.5</b>	<b>9.5</b>	<b>12.6</b>	<b>10.0*</b>			

\* BAH projection; additional grant monies have been requested by AUB.

## SPECIAL FINANCIAL ISSUES

Five specific issues meriting special attention have been identified. They are the exchange rate problem, AUH, accounts receivable, endowment management, and gifts and contributions.

### (1) Financial Projections for AUB Must Be Interpreted in Light of the Fluctuating Exchange Rate

The receipts and expenditures of AUB are in both Lebanese pounds and U.S. dollars. In the past few years there has been a gradual shift in the exchange rate between these currencies, as shown by the following:

1981-82 academic year: LL4.29 - LL4.95 = \$1  
1982-83 academic year: LL4.25 - LL5.05 = \$1

However, this exchange rate situation has become chaotic in the past calendar year, as evidenced by the following data:

<u>Date</u>	<u>Appropriate Exchange Rate</u>
March 1, 1984	LL5.90 = \$1
April 1, 1984	LL5.50 = \$1
May 1, 1984	LL5.60 = \$1
June 1, 1984	LL5.90 = \$1
July 1, 1984	LL6.00 = \$1
August 1, 1984	LL6.00 = \$1
September 1, 1984	LL6.70 = \$1
October 1, 1984	LL7.20 = \$1
November 1, 1984	LL7.70 = \$1

This variation in exchange rates plays havoc with budget execution and financial management.\* In recognition of this situation, AUB prepared the order-of-magnitude budget on the basis of a LL8 = \$1 exchange rate.

Given the mix of currencies involved in both revenues and expenditures, variations of this magnitude can have a significant impact on the projected deficits. AUB analyzed the order-of-magnitude budget for the 1985-86 academic year to show the impact of changes in the assumed exchange rate. The summary of this analysis is shown in the following table.

<u>Assumed Exchange Rate</u>	<u>1985-86 Deficit</u> <u>(\$ Million)</u>
LL8.00 = \$1	19.1
LL7.50 = \$1	19.5
LL7.00 = \$1	20.0
LL6.50 = \$1	20.6
LL6.00 = \$1	21.3

\* A major portion of AUB's revenue is tuition income, which is concentrated in two specific months in the year. For the current academic year it was collected in October, when the exchange rate was LL7.20 = \$1. When this tuition, which is fixed in LL, is converted to dollars, the revenue is lower than anticipated in the budget, which was developed at a lower exchange rate.

(2) The Financial Situation of the American University Hospital (AUH) has Changed Drastically in Recent Years Because of Continuing Hostilities in Lebanon

AUH was built in the early 1970s and was designed to support medical education as a teaching hospital and to provide a wide variety of health care to the citizens of Lebanon and the Middle East. When the hospital was established, it was based on the following patient mix:

<u>Category</u>	<u>No. of Beds</u>
Class I	133
Class II	142
Class III	146

Furthermore, the laboratories and diagnostic capabilities were developed taking into account this patient mix and its ability to pay as well as the teaching nature of the hospital.

In the first several years of operation, the actual patient mix matched the plan, and the hospital operated on a break-even basis. However, the continuing hostilities in the country have drastically changed the actual patient mix, so that today it is as follows:

<u>Category</u>	<u>No. of Beds</u>	<u>Estimated Revenue Per Patient Day (1983)</u>
Class I	50	\$198
Class II	71	\$137
Class III	206	\$ 61

A patient mix of this nature cannot generate the revenues necessary to meet expenditures.

Further complicating the situation is the fact that an increasing percentage of the patients are the responsibility of the Government of Lebanon. And, similar to U.S. insurance companies as well as to the U.S. and state governments with Medicare and Medicaid, rate increases are negotiated with the third-party payer, who generally agrees to pay less than the listed charges. In the case of AUH, the Government of

Lebanon, as the third-party payer, has not accepted any of the posted rate increases for the past several years and only agrees to pay at a much reduced rate.

Because of this situation, posted rate increases per se are not a solution to the problem. The real solution lies with the ability to attract a patient mix more closely aligned with the design mix. Also, it is not possible to alter drastically the expenditure pattern to meet anticipated revenues without seriously affecting the teaching mission of the hospital.

### (3) AUB Faces a Problem in Accounts Receivable

The 1983 audited financial statement for AUB showed an accounts receivable amount of \$13.5 million, up from \$8.9 million in 1982. No further detail is readily available, and the status of these accounts as of June 30, 1984 is not yet finalized.

A major percentage of these receivables are due from the Government of Lebanon to cover health services provided to citizens of Beirut. It is unofficially estimated that the current magnitude of this debt exceeds LL70 million.\*

The potential problem is that the receivables balance of June 30, 1983 represented 19% of total University revenues for that year, and provision for only \$600,000 (4.4% of the total receivables) was made. Any action requiring a more realistic provision for uncollectibility would further enlarge the anticipated deficit positions.

### (4) AUB's Endowment Fund Management Has Performed Well

The Advisors of the American University of Beirut Endowment Fund seek to manage the fund for a superior Rate of Return compared to various market indexes. The theoretical equity maximum in the endowment fund is set at 80%, reflecting a belief in the superiority of equities and in the long-term capacity of the fund to respond to cycles in the market.

\* This debt has already been adjusted for the disallowances described in the section dealing with AUH. Those factors are taken into consideration before an account receivable is created.

The income performance of the fund over the past three years is displayed below:

	<u>1981-82</u>	<u>1982-83</u>	<u>Preliminary 1983-84</u>
Endowment and Similar Funds			
. Book Value (End of FY)	\$20,452,273	\$23,605,915	\$24,892,303
. Market Value (End of FY)	20,684,107	29,961,422	26,340,069
Actual Income Earned	1,429,794	1,571,051	1,473,857
Percentage of Market Value			
. Beginning of FY	6.00%	7.60%	4.92%

A performance analysis by Colonial Consulting for AUB showed the following Rates of Return on the endowment as of June 30, 1984:

<u>Period</u>	<u>Rate of Return</u>
Last 12 months	(1.7)
Last 3 years	11.7
Last 5 years	12.8

The following table compares this performance with other measures of performance, including data from a sample of 155 university endowment funds compiled by the National Association of College and University Business Officers (NACUBO).

	<u>AUB Performance</u>	<u>NACUBO</u>	<u>Dow-Jones Industrial Index</u>	<u>S&amp;P 500 Index</u>
Last 12 months	(1.7)	(2.4)	(2.8)	(4.7)
Last 3 years	11.7	11.0	10.8	10.6
Last 5 years	12.8	11.8	10.2	13.9

These results show a strong comparative performance by the AUB endowment.

(5) AUB Has Made Progress in Increasing Gifts and Contributions

AUB has renewed and expanded its efforts in the development areas. Given the current situation, AUB is concentrating on gifts and contributions to support current operations, although some funds are designated by the donor to add to the endowment. In the year ending June 30, 1984, the Universtiy raised \$4.2 million through its fundraising efforts. The source distribution of this is shown below:

<u>Category</u>	<u>1983-1984 Contributions (\$ Thousand)</u>
Faculty and Staff	7
Alumni	350
Bequest	392
Business	884
Foundation	1,453
Governments (other than U.S.)	10
Individuals	749
Private Groups	<u>393</u>
TOTAL	4,238

Of this amount, \$3.6 million was donated to support current operations and \$0.6 million was added to the endowment. Objectives for the current year are to increase the total amount by 12%. Current progress indicates that this objective is attainable.

## APPENDIX A

### METHODOLOGICAL NOTES

#### BASELINE SCENARIO

The following notes describe the rationale and methodology used to develop the projections in the baseline scenario.

- . Academic program remains constant - No significant changes in the content or scale of the present curriculum.
- . Enrollment of 4,700 students stays constant - Same number in future years.
- . Tuition increases by 19% per year - AUB raised tuition by 25% in the 1983-84 academic year; 15% in the 1984-85 academic year and is basing its planning on a 19% increase in the 1985-86 academic year. This same 19% increase is envisioned in the final 2 years of the projection period.
- . Faculty load in teaching hours and student-faculty ratio both remain constant - The basic teaching load remains at 9 hours per week and the student faculty ratio at 1/17.
- . RADAC revenues and expenditures increase 20% per year - The amount of increase in RADAC revenue has averaged 31.3% over the past 3 years.

Period	% Increase
82-83/81-82	42
83-84/82-83	31
84-85 (Proj.)/83-84	21
Average	31.3

Because of the downward trend in the percentage increase, a future growth rate of 20% is used. This same rate is also applied to RADAC expenditures.

Three projections reflect RADAC's net contribution to AUB overhead also growing by 20% per year. It may be possible to control RADAC expenditures to a growth rate less than that projected for revenue, which would increase the net RADAC contribution.

Salaries increase 11.7% in 1985-86 and 15% per year thereafter - The 11.7% increase in 1985-86 follows AUB estimates and represents a combination of several factors:

- A decrease in the value of the Lebanese pound
- A decrease in the number of faculty in selected areas because enrollment is down from prior years
- An increase in salary for faculty and non-academic personnel.

The projections for 1986-87 and 1987-88 provide for an overall increase in salaries of 15%. This is a budgetary figure selected to be double the recent increases in the United States, reflecting security conditions in Lebanon and deterioration in the Lebanese economy. (The December 12, 1984 edition of the Chronicle of Higher Education, Vol. XXIX, No. 16, reported that, on the average, academic salaries in the U.S. for higher education increased by 7.3% over the prior year.)

Hospital Revenues Dip, Then Grow - The Health Services (Hospital) revenues are projected to decrease in 1985-86 because of an anticipated further shift in the patient mix toward Class III patients and no approval of higher rates by the Government of Lebanon, which must ratify any rate increase that would apply to patients for which the Government has financial responsibility. In the final 2 years of projections, a 20% rate increase is used to estimate the maximum that could be anticipated given local competition from other hospitals and clinics.

Hospital expenses increase - The basic expenditures for the hospitals are projected to grow 30% per year. This rate of growth is not apparent in the projection for 1985-86 as compared to 1984-85 because of the shift in exchange rates from LL6 = \$1 in 1984-85 to LL8 = \$1 in 1985-86. The 30% increase is based on the following factors:

- The internal inflation rate in Lebanon, which is estimated by various sources to range from 10-20%
- Unavailability of goods and supplies, especially for the hospital, in the Lebanese marketplace, thereby requiring greater imports purchased in dollars.

Gift and endowment income remain constant - There is no basis for assuming that they will change significantly in either direction.

All other revenues and expenditures increased by varying percentages - These percentages are currently being used by AUB and appear to be reasonable. The percentages used for these categories are shown in Exhibit III of the report.

#### ENHANCEMENT SCENARIO

Most of the projections in this scenario are identical to the baseline scenario, with the following exceptions:

Tuition and student enrollment increases - In the enhancement scenario, the rate of tuition increase is the same as that in the baseline scenario. In addition, an increase to 5,000 students by the 1987-88 academic year is projected, half of it in the 1986-87 academic year, the other half in 1987-88.

Faculty load increases - The average class load per teacher increases from a current level of 9 hours per week to 12 hours per week in the 1987-88 academic year. This increase is reflected in three increments (on the average): 10 hours for 1985-86; 11 hours for 1986-87; and 12 hours for 1987-88.

Gift income increases 12% per year - The gifts and grants component of both the "Educational and General" category and the "Nonfunctional" category increases at a rate of 12% per year. AUB currently is implementing a more aggressive development program with the objective of increasing contributions by 12% annually.

Auxiliary enterprises revenue and expenditures increase with enrollment - The revenue and expenditures in this category are further increased from the baseline projections to reflect the additional student enrollment.

## APPENDIX B

### NOTE ON PREVIOUS REPORT BY BOOZ, ALLEN & HAMILTON INC.

Booz, Allen and Hamilton Inc. conducted a comprehensive analysis of AUB's goals, finances, programs, and management. This analysis led to the publication of a June 1983 report entitled Strengthening The American University of Beirut. This report projected a balanced operating budget by 1986-87 on the basis of certain assumptions. These assumptions are presented below along with comments on relevant developments since 1983 showing why the deficits foreseen in this report are now likely.

<u>ASSUMPTION</u>	<u>COMMENT</u>
1) U.S. inflation - 10% per year	Actual rate - about 4% per year
2) Lebanese inflation - 15% per year	Actual rate - about 10-20% per year
3) Exchange rate - LL4 = \$1 U.S.	Actual rate (12/84) - LL8 = \$1 U.S.
4) Enrollments - no changes (4,500)	Actual enrollment (10/84) - 4,700
5) Tuition increases - above inflation	Actual increase
1983-84 - 15%	- 25% (10-20% inflation)
1984-85 - 10%	- 15% (10-20% inflation)
1985-86 - 5%	
1986-87 - 5%	
6) Salary increases - equal inflation	Actual increases - 1983-84: 16% (10-20% inflation)
	1984-85: not set
	(10-20% Inflation)
7) All other revenues and expenditures - equal inflation	Mixed

ASSUMPTION

COMMENT

8) Hospital expenditures balance revenues by preserving required prices and patient mix and by collecting monies owed by the Government of Lebanon for care of "third class," or "ward," patients. (Preliminary FY82 data available in May 1983 showed a slight financial surplus, the first in several years.)

Hospital price increases have been close to inflation but the patient mix has changed to the point that "third class" patients comprise 63% of the total. (Revenue per patient-day for these ward patients is less than one-third the revenue of "first class" patients.) Furthermore, the AUH receivable from the Government is reported to approach LL70 million (\$8.8 million at LL8-\$1 U.S.). The problem is growing both because the Government does not recognize the full charge billed by the University and because of nonpayment.

## APPENDIX C

### Persons Interviewed and Documents Reviewed

#### A. Persons Interviewed

Harold Freeman  
Agency for International Development

Najeeb E. Halaby, Chairman  
Board of Trustees  
American University of Beirut

William Hoffman  
American University of Beirut

Calvin H. Plimpton, MD  
President  
American University of Beirut

E. Terry Prothro  
Faculty of Arts and Sciences  
American University of Beirut

William F. Rice  
Vice-President and Secretary of the Corporation  
American University of Beirut

David Santos  
Agency for International Development

B. Documents Reviewed

- AID. American Schools and Hospitals Abroad, undated Program Summary.
- AID. American University of Beirut (AUB), an April 1984 memo.
- AUB. Application for Assistance to ASHA for FY 1985.
- AUB. Gift Receipt Report, July 1-Oct. 31, 1984 - Cumulative.
- AUB. Letter to the Honorable W. Antoinette Ford, from William Hoffman, October 22, 1984.
- AUB. Minutes of Executive Committee and the Corporation, 1984.
- AUB. Statement of Revenue and Operating Expenditures and Capital Expenditures for Fiscal Years 1981-82 through 1985-86 (November 1, 1984; updated).
- AUB. 1984-1985 Catalog.
- Booz, Allen & Hamilton, Strengthening the American University of Beirut, June 1983.
- Colonial Consulting Corporation, Performance Analysis for Assets Managed by: Fiduciary Trust Company, October 1984.
- Fiduciary Trust Company of New York, Portfolio Review for Endowment and Related Funds, November 16, 1984.
- Peat Marwick and Mitchell, American University of Beirut, Financial Statements and Schedule June 30, 1983 (with Accountants' Report thereon), November 23, 1983.